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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/576,748	02/15/2007	Robert Henri-Marcel Stouffs	19790-008US1 CER03-0015	8191

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FISH & RICHARDSON P.C. (TC)
PO BOX 1022
MINNEAPOLIS, MN 55440-1022

EXAMINER	
GWARTNEY, ELIZABETH A	

ART UNIT	PAPER NUMBER
1781	

NOTIFICATION DATE	DELIVERY MODE
05/20/2011	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

Office Action Summary	Application No.	Applicant(s)	
	10/576,748	STOUFFS ET AL.	
	Examiner	Art Unit	
	ELIZABETH GWARTNEY	1781	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *2/24/2011*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *14,16-18,20-23,26-30 and 32-37* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *14,16-18,20-23,26-30 and 32-37* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *20110202*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The Amendment filed February 24, 2011 has been entered. Claim 24 has been cancelled.

Claims 14, 16-18, 20-23, 26-30 and 32-37 are pending.

2. The previous claim objections, 112 1st Paragraph, and 2nd Paragraph rejections have been withdrawn in light of applicants' amendments made February 24, 2011.

Claim Objections

3. **Claims 16 and 17 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.** Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Given **claim 14** already recites "turbulating a quantity of A of maltitol powder and a quantity B of a maltitol-containing syrup in a stream of air" and wherein the gas is nitrogen and/or air", **claims 16 and 17** requiring that a gas, including nitrogen or air, is used for the turbulating step does not further limit the subject matter.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. **Claims 14-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

Claim 14 recites the limitation "the gas" in line 6. There is insufficient antecedent basis for this limitation in the claim. While the claim, at lines 3 and 4, describes "turbulating . . .in a stream of air," there is no antecedent basis for the limitation "the gas." In this case, "air" is considered a narrower limitation of the term "gas."

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. **Claims 14, 16-18, 20-23, 26-30 and 32-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beauregard et al. (US 6,458,401).**

Regarding **claims 14, 16-17, 20 and 33** and Beauregard et al. disclose a process for preparing powder containing crystalline particles of maltitol comprising the steps of:

(a) continuously mixing maltitol syrup having a dry mater content of at least 70% by weight and a maltitol content of at least 85% by weight on a dry matter basis, the mixing being effected by simultaneously dispersing the maltitol syrup and maltitol containing seeds into an open rotating bed containing maltitol based granules (C2/L35-45);

(b) keeping the granules moving at a temperature below the melting point of the granules, i.e. at a temperature of 5° to 90°C in a current of air (C3/L43-46).

(c) drying the granulated product obtained in a fluidized bed to achieve a residual moisture content of ***not more than*** 2% (C3/L47-48);

(d) grinding the granules to the required particle size and then sorting the particles by sifting (C3/L49-51); and

(e) recycling the particles eliminated by sifting to the granulator for use as maltitol containing seeds in step (a) (C3/L49-52).

Given Beauregard et al. disclose a process for preparing crystalline maltitol with maltitol granules and maltitol syrup substantially similar to that presently claimed, it is clear that intrinsically the content of maltitol in the resulting crystalline maltitol would be from about 92% w/w to about 97% w/w based on dry substance.

Beauregard et al. disclose that the maltitol syrup and seed material are introduced into the granulator to achieve a seed/syrup weight ratio of 4 parts seed to 1 part maltitol syrup (C4/L47-51).

Regarding **claim 18**, Beauregard et al. disclose all of the claim limitations as set forth above and that the matured granules are submitted to a rough grinding and dried in a fluidized bed using air at about 90°C (C4/L65-67).

Regarding **claims 21-23**, Beauregard et al. disclose all of the claim limitations as set forth above. Beauregard et al. also disclose that that the temperature of the maltitol syrup is 80°C (C3/L20-21).

Regarding **claim 26**, Beauregard et al. disclose all of the claim limitations as set forth above. Given Beauregard et al. disclose a process for preparing maltitol substantially similar to that presently claimed, it is clear that the powder containing crystalline particles of maltitol would intrinsically have maltitol content from about 90% w/w to about 99.5%.

Regarding **claims 27- 30 and 32**, Beauregard et al. disclose a process for preparing powder containing crystalline particles of maltitol comprising the steps of:

(a) loading powder containing crystalline maltitol, i.e. seed material, into an open rotating bed (C3/L16-28);

(b) adding maltitol syrup into the open bed, wherein said maltitol syrup has a dry substance content of about 70% (C3/L16-28);

(c) spraying said maltitol syrup into the open bed to coat said see material, wherein the maltitol syrup is sprayed onto the maltitol seed material using an air atomizing nozzle at a temperature of at least 80°C to obtain granules (C2/L54-57, C3/L16-28);

(d) keeping the granules moving at a temperature below the melting point of the granules, i.e. between 5° and 90°C, using a current of air (C3/L43-46).

(e) drying said coated seed material in a fluidized bed to achieve a residual moisture content of ***not more than*** 2% (C3/L16-50);

(f) grinding the granules to the required particle size and then sorting the particles by sifting (C3/L49-51); and

(g) recycling the particles eliminated by sifting to the granulator for use as maltitol containing seeds (C3/L49-52).

Given Beauregard et al. disclose a process for preparing crystalline maltitol with maltitol syrup and maltitol particles substantially similar to that presently claimed, intrinsically the resulting crystalline maltitol would have a maltitol content of from about 95.5% to about 96.5%.

Regarding **claims 34-37**, Beauregard et al. disclose all of the claim limitations as set forth above. Beauregard et al. also disclose sugar free shortbread cookies and oatmeal cookies comprising flour, shortening, sorbitol and 18% by weight maltitol (C5/Example 2) and a tablet comprising 99% maltitol (C4/L11-16).

Response to Arguments

10. **Applicants' arguments filed February 24, 2011 have been fully considered but they are not persuasive.**

Applicants argue that since Beauregard et al. disclose using an open rotating receptacle, the initial step in Beauregard et al. inherently occurs at room temperature. Applicants find that "Beauregard et al. does not disclose or even suggest to one skilled in the art that gas could be

used to turbulate the maltitol powder and maltitol syrup, nor does Beauregard et la. disclose or even suggest to one skilled in the art that the gas could be heated and used at a temperature of from about 80°C to about 95°C."

Beauregard et al. teach a step wherein the mixture of maltitol powder and maltitol syrup is kept moving at a temperature of 5° to 90°C using a current of air (C3/L43-46). With respect to claim 14, it is the Examiner's position that this disclosure clearly meets the claim limitation "turbulating a quantity A of maltiol powder and a quantity B of a maltitol-containing syrup in a stream of air in a fluid bed at a temperature between about 20°C and a second temperature of which the maltitol powder is still solid."

With respect to claim 27, given Beauregard et al. teach moving the mixture of maltitol powder and maltitol syrup at a temperature of 5° to 90°C using a current of air (C3/L43-46), it necessarily follows that air is provided to the rotating receptacle at a temperature that overlaps that presently claimed.

Conclusion

11. **The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.**

-**Heikkilä et al. (WO 99/59426)** teach a process of crystallizing xylitol by contacting xylitol solution with particulate xylitol ,suspended in a gas, and drying the material to produce xylitol crystals. Heikkila et al. teach that powdered xylitol is fluidized with a flow of air (55°-85°C) and then a xylitol solution is fed into the chamber with a pump, atomized by means of a

nozzle and sprayed over the fluidized xylitol powder (page 13/Example 3). The reference does not teach maltitol.

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ELIZABETH GWARTNEY whose telephone number is (571)270-3874. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, D. Lawrence Tarazano can be reached on (571) 272-1515. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. Lawrence Tarazano/
Supervisory Patent Examiner, Art Unit 1781

/E. G./
Examiner, Art Unit 1781